

C.11 Air Emissions Subpart AA/BB/CC

MICHIGAN DISPOSAL WASTE TREATMENT PLANT (MDWTP)
MID 000 724 831
2016 PERMIT APPLICATION

**FORM EQP 5111 ATTACHMENT TEMPLATE C11 - SUBPART AA
AIR EMISSIONS FROM PROCESS VENTS**

This document is an attachment to the Michigan Department of Environmental Quality's (DEQ) *Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities*. See Form EQP 5111 for details on how to use this attachment.

The administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), R 299.9504, R 299.9508, R 299.9605, and R 299.9630; and Title 40 of the Code of Federal Regulations (CFR), Part 264, Subpart AA, and 40 CFR §270.24 establish requirements for controlling organic air emissions from process vents. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003.

This license application template includes the information required by 40 CFR §270.24 to address air emission control requirements for process vents at hazardous waste management facilities for the Michigan Disposal Waste Treatment Plant facility in Belleville, Michigan.

(Check as Appropriate)

- ☒ Applicant for Operating License for Existing Facility
- ☐ Applicant for Operating License for New, Altered, Enlarged, or Expanded Facility
- ☐ Process Vents Subject to 40 CFR Part 264, Subpart AA (R 299.9630)
- ☒ No Process Vents Exist That Are Subject to 40 CFR Part 264, Subpart AA (R 299.9630)

 EPA 1990. *Hazardous Waste TSDF – Technical Guidance Document for RCRA Air Emission Standards for Process Vents and Equipment Leaks*. Document No. EPA-450/3-89-021. July.

**FORM EQP 5111 ATTACHMENT TEMPLATE C11 - SUBPART BB
AIR EMISSIONS FROM EQUIPMENT LEAKS**


This document is an attachment to the Michigan Department of Environmental Quality's (DEQ) *Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities*. See Form EQP 5111 for details on how to use this attachment.

The administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), R 299.9504, R 299.9508, R 299.9605, and R 299.9631; and Title 40 of the Code of Federal Regulations (CFR), Part 264, Subpart BB, and 40 CFR §270.25 establish requirements for controlling organic air emissions from equipment leaks. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003.

This license application template addresses air emission control requirements for equipment leaks at the hazardous waste management facility for the Michigan Disposal Waste Treatment Plant (MDWTP) facility in Belleville, Michigan.

(Check as Appropriate)

- ☒ Applicant for Operating License for Existing Facility
- ☐ Applicant for Operating License for New, Altered, Enlarged, or Expanded Facility
- ☐ Equipment Subject 40 CFR Part 264, Subpart BB (R 299.9631)d
- ☒ No Equipment Exists That Is Subject to 40 CFR Part 264, Subpart BB (R 299.9631)
- ☐ Applicant Elects to Document Compliance with the Relevant Provisions of the Regulations at 40 CFR Part 60, Part 61, or Part 63 Rather than 40 CFR Part 264, Subpart BB

 EPA 1990. *Hazardous Waste TSDF – Technical Guidance Document for RCRA Air Emission Standards for Process Vents and Equipment Leaks*. Document No. EPA-450/3-89-021. July.

FORM EQP 5111 ATTACHMENT TEMPLATE C11 - SUBPART CC
AIR EMISSIONS FROM TANKS, CONTAINERS, AND SURFACE IMPOUNDMENTS

This document is an attachment to the Michigan Department of Environmental Quality's (DEQ) *Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities*. See Form EQP 5111 for details on how to use this attachment.

The administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), R 299.9504, R 299.9508, R 299.9605, and R 299.9634; and Title 40 of the Code of Federal Regulations (CFR), Part 264, Subpart CC, and 40 CFR §270.27, establish requirements for controlling organic air emissions from tanks, containers, and surface impoundments. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003.

This license application template addresses air emission control requirements for tanks, containers, and surface impoundments at the hazardous waste management facility for the Michigan Disposal Waste Treatment Plant (MDWTP) facility in Belleville, Michigan.

(Check as Appropriate)

- ☒ Applicant for Operating License for Existing Facility
- ☐ Applicant for Operating License for New, Altered, Enlarged, or Expanded Facility
- ☐ Tanks, Containers, or Surface Impoundments Subject to 40 CFR Part 264, Subpart CC (R 299.9634)
- ☐ No Tanks, Containers, or Surface Impoundments Subject to 40 CFR Part 264, Subpart CC, Exist at the Facility (R 299.9634)

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C11.C AIR EMISSIONS FROM TANKS, CONTAINERS, AND SURFACE IMPOUNDMENTS

[R 299.9634 AND 40 CFR PART 264, SUBPART CC]

- ☒ Tanks
- ☒ Containers
- ☐ Surface Impoundments

C11.C.1 WASTE STREAMS

[R 299.9634 and 40 CFR §264.1082(c)]

MDWTP may process hazardous waste subject to 40 CFR 264 Subpart CC requirements from off-site facilities in the East Side treatment tanks. Generators provide information on the regulatory status of the waste as part of their waste characterization. Analytical data or process knowledge may be requested to support their determination. Waste streams are reviewed as described in A2 Chemical and Physical Properties and A3 Waste Analysis Plan.

C11.C.2 TANKS DESCRIPTION

[R 299.9634 and 40 CFR §270.27(a)(1) and (3)]

Attachment C2 Tank Systems provides all tank specification.

C11.C.2(a) Description of Level 1 and 2 Controls

[R 299.9634 and 40 CFR §264.1084(d)]

C11.C.2(a)(1) Tank Located Within an Enclosure Vented to a Combustion Device

[R 299.9634 and 40 CFR §264.1084(i)]

Tank designs are discussed in C2 Tank Systems. The East Side treatment tanks are enclosed and vented to a combustion device. The pollution control devices are operated in accordance with Section 1 of the facility Renewable Operating License (ROP)

C11.C.3 CONTAINER DESCRIPTIONS

[R 299.9634 and 40 CFR §§264.1086, and 270.27(a)(2)]

Each of the container storage areas may store VOC bearing waste streams subject to Subpart CC requirements. Container level 1,2 or 3 may be received. Generators are responsible for ensuring containers meet regulatory requirements for the waste placed inside the container prior to transportation. Containers remain closed at all times except during sampling or transfer of the waste.

C11.C.3(a) Inspection Procedures

[R 299.9634 and 40 CFR §264.1086(c)(4)]

Inspections will be completed as outlined in Attachment A5 Inspection Schedule.

C11.C.3(b) Waste Transfer Procedures
[R 299.9634 and 40 CFR §264.1086(e)(2)]

Waste subject to Subpart CC is transferred in accordance with the applicable control level requirements

C11.C.4 DESCRIPTION OF CLOSED-VENT SYSTEMS AND CONTROL DEVICES
[R 299.9634 and 40 CFR §§264.1087 and 270.27(a)(5)]

The closed-vent system and control device are operated in accordance with the requirements of the facility's Renewable Operating License. Process flow diagrams are provided in the engineering plans.

C11.C.4(a)(1) Description of Closed-Vent System
[R 299.9634 and 40 CFR §264.1087(b)]

MDWTP operates an enclosed ventilation system on the East Side of the treatment building in accordance with specification outlined in the Renewable Operating Permit (ROP). The system moves air from inside the building through a baghouse dust collector. Air then moves into the Regenerative Thermal Oxidizer (RTO) where vapors are combusted and is then passed through a caustic scrubber prior to being discharged through the stack.

C11.C.4(a)(2) Description of Control Devices
[R 299.9634 and 40 CFR §264.1087(c)]

The Regenerative Thermal Oxidizer is operated with a minimum control efficiency of 95% as required by the facility ROP.

C11.C.4(a)(3) Inspection Procedures
[R 299.9634 and 40 CFR §264.1087(b)(4) and (c)(7)]

Inspections and calibrations are completed in accordance with ROP requirements.

C11.C.5 DESCRIPTION OF RECORD KEEPING PROCEDURES
[R 299.9634 and 40 CFR §264.1089(a)]

Recordkeeping procedures are completed as specified in the ROP.

C11.C.5(a) Description of Tank Record Keeping Procedures
[R 299.9634 and 40 CFR §264.1089(b)]

Attachment C2 Tanks outlines tank recordkeeping procedures.

C11.C.5(a)(1) Tank Identification Numbers
[R 299.9634 and 40 CFR §264.1089(b)(1)(i)]

East treatment building Tanks E-H may accept Subpart CC regulated waste.

C11.C.5(a)(2) Inspection Records

[R 299.9634 and 40 CFR §264.1089(b)(1)(ii)]

Inspections are completed as outlined in attachment A5 Inspection Schedule.

C11.C.5(a)(3) Calculations and Records for Demonstrating Compliance with Enclosure Requirements for Level 2 Controls

[R 299.9634 and 40 CFR §264.1089(b)(2)(iv)]

The East Side treatment tanks are located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device. In 1998 MDWTP confirmed compliance with the permanent enclosure requirements. The facility's ROP specifies the maintenance, operating, recordkeeping and reporting requirements for the controls.

C11.C.6(b) Closed-Vent System and Control Device Records

[R 299.9634 and 40 CFR §264.1089(e)]

C11.C.6(b)(1) Performance Certification

[R 299.9634 and 40 CFR §264.1089(e)(1)(i)]

Performance certifications are completed and maintained in accordance with the facility ROP.

C11.C.6(b)(2) Design Analysis Documentation

[R 299.9634 and 40 CFR §264.1089(e)(1)(i)(ii)]

Control device analysis and a signed certification that the control equipment meets applicable specifications are maintained onsite in accordance with requirements outlined in the ROP.

C11.C.6(d)(3) Performance Test Plan and Results

[R 299.9634 and 40 CFR §264.1089(e)(1)(i)(iii)]

Performance testing results are maintained onsite and provided to the AQD in accordance with the requirements outlined in the ROP.

C11.C.6(b)(4) Planned Routine Maintenance Schedules

[R 299.9634 and 40 CFR §264.1089(e)(1)(i)(v)]

Maintenance is performed as outlined in the ROP, and is reported as required.

C11.C.6(b)(5) Descriptions of Unplanned Malfunctions

[R 299.9634 and 40 CFR §264.1089(e)(1)(i)(vi)]

Unplanned malfunctions are documented and reported as required by the ROP.

C11.C.5(c) Documentation Required for Tanks and Containers Not Using Air Emission Controls

[R 299.9634 and 40 CFR §264.1089(i)]

Air emissions controls are not utilized for waste streams that contain VOC <500ppm by weight.

C11.C.5(d) Certifications and Identification of Federal Clean Air Act of 1990 Requirements
[R 299.9634 and 40 CFR §264.1089(j)(1) and (2)]

Section 1 of the facility ROP outlines the specifications operating, testing, monitoring, inspection, and recordkeeping requirements.